BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF ST. REGIS CORPORATION, Appellant, v. PUGET SOUND AIR POLLUTION CONTROL AGENCY, and STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondents.	PCHB Nos. 83-175, 83-179, 83-186, and 83-187 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter, the appeal of three $250 civil penalties (total $750) for emissions allegedly in violation of Department of Ecology WAC 173-405-040(10), opacity, and WAC 173-405-040(6), fugitive emissions, came on for hearing before the Pollution Control Hearings Board, Gayle Rothrock, Chairman, and David Akana and Lawrence J. Faulk, members, convened at Lacey, Washington, on November 7, 1983. Administrative Law Judge William A. Harrison presided. Respondent elected a formal hearing pursuant to RCW 43.21B.230.

Appellant appeared by its attorneys Kathryn J. Nelson and Donald L. Anderson. Respondent Puget Sound Air Pollution Control Agency appeared by its attorney Keith D. McGoffin. Respondent State Department of Ecology appeared by Wick Dufford, Assistant Attorney General. Reporter Bibi Carter recorded the proceedings.

Witnesses were sworn and testified. Exhibits were examined. From testimony heard and exhibits examined, the Pollution Control Hearings Board makes these

FINDINGS OF FACT

I

Appellant, St. Regis Corporation, owns and operates a kraft pulping mill in Tacoma, Washington. The kraft process involves "cooking" wood chips in a liquor consisting of a solution of sodium hydroxide and sodium sulphide. The purpose of cooking the chips is to dissolve the lignin and other noncellulose portions of the wood which cement the cellulose fibers together. The result is a pulp of free fibers which can be assembled into paper.

II

After the cooking occurs, there is a process to recover and reactivate the spent liquor for eventual reuse. In this recovery process the spent liquor is evaporated to concentrate it. The resulting thick liquor is then burned in a recovery furnace. Lignin and other extracts from the wood maintain combustion. The cooking chemicals form as a smelt at the bottom of the furnace, from which they are recovered. The incineration of the spent liquor produces

furnace exit gas.

III

The smelt from the recovery furnaces described above first passes through dissolving tanks. The dissolved material then goes through a causticizing system. This reactivates the liquor for reuse in cooking wood chips to produce pulp.

Lime mud from the causticizing system is baked in kilns to produce lime. This, in turn, is used in the causticizing system. Exhaust gases are emitted from the lime kilns.

IV

This matter is the consolidation of three separate appeals, the first two (June 8 and July 5, 1983) concerning emissions from the recovery furnaces, the last (June 21, 1983) concerning handling of lime mud. A fourth appeal, relating to events of May 18, 1983, was withdrawn by appellant on the record at this hearing.

V

June 8, 1983. Appellant, St. Regis, stipulates that on this date an emission occurred from its No. 4 recovery furnace which was in excess of respondent Department of Ecology's opacity regulation for kraft mills, WAC 173-405-040(10). This regulation prohibits opacity greater than 35 percent for more than 6 consecutive minutes. We find that appellant's emission was of 100 percent opacity for 20 consecutive minutes. This commenced at 3:09 p.m. Earlier, at 2:35 p.m. appellant made a telephone report to respondent, Puget Sound Air Pollution Control Agency (PSAPCA), notifying it of the breakdown

of pollution control equipment on the furnace. At PSAPCA's request, St. Regis later filed a written report. The pollution control equipment on the subject No. 4 recovery furnace is an electrostatic precipitator consisting of a series of electrodes with high static electrical charges to which exhaust particles adhere. Periodic mechanical rapping of the electrodes shakes loose the particles which fall to a hopper bottom and the collected dust is removed from the hopper bottom by a series of screw conveyors. This particular precipitator has two main chambers known as the West pass and the East pass. Appellant's written report filed after the incident states, and we find, that only the West pass of the precipitator ceased operating when one screw conveyor failed and automatically cut off the power supply to that pass. A screw failure of this kind has occurred only 2 or 3 times in the previous 10 years. The operator is then supposed to immediately close a damper isolating the West pass and diverting all flue gas to the East pass. In this instance, the damper to the west pass was not fully closed, and visible emissions were exacerbated accordingly.

Respondent PSAPCA imposed a $250 civil penalty which appellant recieved on July 29, 1983, for violation of WAC 173-405-040(10), opacity, from which appellant appeals. The appeal was filed on August 26, 1983.

VI

July 5, 1983. In manufacturing wood pulp, appellant operates on a continuous basis, periodically shutting down production for

maintenance and repair. Such shutdowns have customarily coincided with holidays such as July 4th, Labor Day and Christmas. In this instance, appellant stipulates that on July 5, 1983, it was conducting a general startup of the kraft mill following the July 4th shutdown. It stipulates to emissions from No. 3 recovery furnace in excess of Department of Ecology's opacity regulation for kraft mills, WAC 173-405-040(10). This regulation prohibits opacity greater than 35 percent for more than 6 consecutive minutes. We find that appellant's emission was of 45-60 percent opacity for 9 3/4 consecutive minutes. This commenced at 3:42 p.m. Earlier, at 3:00 p.m. appellant made a telephone report to respondent PSAPCA stating that No. 3 recovery furnace was about to be started. At respondent's request appellant later filed a written report attributing the incident to the startup process. In this process, the recovery furnace first burns oil to dry out the furnace and warm up the air pollution control equipment (electrostatic precipitators). Until the precipitators reach 275°F they will not function and are not energized. On the day in question the warm up of the precipitators lasted from 3:00 p.m. on July 5, 1983, to 2:15 p.m. the next day, July 6, 1983, nearly 24 hours. During this period, exhaust gases were emitted from the recovery furnace without any air pollution control equipment. On this record, respondents did not prove that the recovery process could be redesigned, operated or maintained; nor, that the electrostatic precipitators could be redesigned, operated or maintained; nor that other pollution control equipment could be

installed to avoid excessive emissions during startup.

Respondent PSAPCA imposed a $250 civil penalty which appellant received on September 1, 1983, for violation of WAC 173-405-040(10), opacity, from which appellant appeals. The appeal was filed on September 29, 1983.

VII

We take official notice, pursuant to WAC 371-08-188, of the disposition of three prior appeals before this Board involving appellant's recovery furnaces during startup:

1. St. Regis v. PSAPCA and DOE, PCHB No. 82-135, involving startup after July 4, 1982. We affirmed the violation and civil penalty solely because notice was untimely under then WAC 173-405-077 noting that this startup of No. 4 recovery furnace otherwise qualified for exculpation.

2. St. Regis v. DOE, PCHB No. 81-168, involving startup after July 4, 1981. We reversed the violation and civil penalty under then WAC 173-405-077 when failure of two screw conveyors disabled both the East and West pass of the electrostatic precipitator on No. 4 recovery furnace.

3. St. Regis v. PSAPCA, PCHB No. 80-224, involving startup after Labor Day, 1980. We reversed the violation and civil penalty under then WAC 173-405-077 because the startup of No. 3 recovery furnace qualified for exculpation.

In each of the above matters we concluded that the incident complied with WAC 173-405-077(5) in that it was unavoidable. Under that rule

an incident could only be unavoidable if:

> (a) The process equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with minimized emissions.
>
> (b) Repairs or corrections were made in an expeditious manner when the operator knew or should have known that emission limitations were being or would be exceeded.
>
> (c) The incident is not one in a recurring pattern which is indicative of inadequate design, operation or maintenance.

which we concluded to be the case.

VIII

June 21, 1983. On the prior day to this event, the air pollution control equipment (Peabody scrubber) on the lime kiln ceased to function. On the day in question, June 21, 1983, appellant telephoned a report to respondent, PSAPCA, notifying it that the kiln had been closed down but was now operating again. It is normal to remove lime waste from the kiln in relatively small amounts. An appropriate quantity of causticizing waste is kept on hand to mix with this lime waste and thus avoid dust problems. Because the kiln was closed down, however, some 8 tons of lime had to be removed from the kiln in a partially baked, very powdery condition. This was far too much for the normal amount of causticizing waste on hand. Moreover, a larger amount of causticizing waste would probably have been incapable of avoiding dust problems due to the formidable task of mixing it with so large a quantity of lime. Suppression of dust with water spray, a conventional technique, is inappropriate because mixing water with

lime can cause an explosive reaction. Once removed from the kiln, the 8 tons of lime was loaded into trucks with a front-end loader. This loading resulted in visible emissions of 30-50 percent opacity for 9 consecutive minutes. This commenced at 9:43 a.m. The telephone call from appellant notifying PSAPCA that the kiln was closed down occurred at 9:45 a.m. Appellant has received one prior notice of violation (July 18, 1980) for loading lime waste into a truck at the lime kiln. There were also four other notices of violation in 1980 but these related to dumping lime waste from the truck onto a dump site. There is no indication whether these notices related to a breakdown incident, such as the one before us.

Respondent PSAPCA imposed a $250 civil penalty which appellant received on September 1, 1983, for violation of both WAC 173-405-040(10), opacity, and WAC 173-405-040(6), fugitive emissions. The appeal was filed on September 29, 1983.

IX

The Federal Clean Air Act, 42 U.S.C. 7401, et seq., requires the U.S. Environmental Protection Agency to set primary National Ambient Air Quality Standards (NAAQS) the attainment and maintenance of which are requisite to the public health. Section 109. Such a standard for total suspended particulate was established by EPA on November 25, 1971 (36 Fed. Reg. 22, 384). Section 107 of the Federal Clean Air Act, supra, requires states to identify areas exceeding primary NAAQS and requires EPA to promulgate lists of such areas with such modifications as deemed necessary. The Tacoma tideflats geographic

area has been designated by EPA as an area which does not meet the primary NAAQS for the total suspended particulate (40 C.F.R. 81.348, 43 Fed. Reg. 8964, 3/3/78, as amended at 43 Fed. Reg. 40,435, 9/11/78; 44 Fed. Reg. 68,834, 11/30/79). Appellant's kraft mill is located within this Tacoma tideflats area. Moving lime with a front-end loader is a source of total suspended particulate matter and contributes to ambient levels of total suspended particulate in the Tacoma tideflats area. The emissions caused by moving lime with a front-end loader exacerbate the problem of NAAQS nonattainment.

X

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such.

From these Findings the Board makes these

CONCLUSIONS OF LAW

I

On June 8, 1983, appellant violated Department of Ecology WAC 173-405-040(10) by causing or allowing the emission of a plume from a kraft recovery furnace which had an average opacity greater than 35 percent for more than 6 consecutive minutes in any 60-minute period. Because this resulted from a breakdown of pollution control equipment which appellant had earlier reported to PSAPCA, the $250 civil penalty should be mitigated by suspension. Mitigation should not be complete, however, because of appellant's failure to fully close the damper, a failure which exacerbated the emission. The $250 penalty should be affirmed but $150 thereof suspended on condition

that appellant not violate DOE's opacity regulation, WAC 173-405-040(10), for six months.

II

On July 5, 1983, appellant violated Department of Ecology WAC 173-405-040(10) by causing or allowing the emission of a plume from a kraft recovery furnace which had an average opacity greater than 35 percent for more than 6 consecutive minutes in any 60-minute period. Because this resulted from a startup of the recovery furnace which appellant had earlier reported to PSAPCA, and was not proven to be the result of inadequate design, operation or maintenance, the $250 penalty should be affirmed but suspended on condition that appellant not violate DOE's opacity regulation, WAC 173-405-940(10), for six months.

III

On June 21, 1983, appellant violated Department of Ecology WAC 173-405-040(10) by causing or allowing the emission of a plume from an emission unit, which emission has an average opacity greater than 20 percent for more than 6 consecutive minutes in any 60-minute period.[1] We reject appellant's contentions that the emission in

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1. The Notice and Order of Civil Penalty issued to appellant by PSAPCA refers to emission "of a plume...from any kraft recovery furnace or lime kiln or other source." This is the former wording of WAC 173-405-040(10). Appellant's pleading (Notice of Appeal) addresses the new wording of that rule effective May 16, 1983, which substitutes the term "emission unit" for "other source." P.2. A Notice and Order of Civil Penalty serves the function of a complaint. By analogy to CR 15(b) the Notice and Order of Civil Penalty is hereby deemed to be amended to reflect the new wording of WAC 173-405-040(10) which is the wording applicable to this case.

question cannot be considered a "plume" and that the loading of the lime, which caused the emission, cannot be considered an "emission unit." Words in a regulation, unless specifically defined, are to be given their usual and ordinary meaning. Stastny v. Board of Trustees, 32 Wn. App. 239, 253, 647 P.2d 496 (1982). Plume is defined by Webster's Third New International Dictionary (unabridged) to mean: 3: something that is felt to resemble a feather (as in shape, appearance or lightness). Appellant's emission resembled a feather at least insofar as appearance and lightness. It may therefore be considered a plume within the meaning of the regulation. "Emission unit" is defined by the regulation at WAC 173-405-021(8) as:

> ...any equipment, device, process, or activity that produces and emits to the outside air, or that may produce and emit to the outside air, any contaminant regulated by state or federal law. (Emphasis added.)

Appellant's lime loading is a process or activity that emitted a contaminant, dust, to the outside air. Dust is a contaminant regulated by state law, WAC 173-405-201(1). Appellant's lime loading process is therefore an "emission unit" within the meaning of the regulation.

A civil penalty of $250 is allowable for violation of WAC 173-405-040(10), see RCW 70.94.431, and is particularly justified in view of appellant's emission of suspended particulate where it is already a health problem under national standards. However, because the emission was the result of a breakdown of pollution control equipment which appellant had earlier reported to PSAPCA, the $250

civil penalty should be partly suspended on condition that appellant not violate DOE's opacity regulation, WAC 173-405-040910), for six months.

IV

On June 21, 1983, appellant did not violate Department of Ecolgy WAC 173-405-040(6) which provides:

> Fugitive emissions. Each kraft mill shall take reasonable precautions to prevent fugitive emissions.

The evidence shows that appellant had a sufficient antidote to lime dust (causticizing waste) for the normal amount of lime taken from its kilns. This constituted reasonable precautions where a breakdown of the kiln's air pollution control was unexpected. Now that such breakdown has occurred, however, appellant should adopt a plan for dealing with the lime resultant from such a breakdown which does not aggravate the nationally recognized problem of suspended particulate prevailing in that area. A system of tarps carefully placed over the lime might accomplish this as well as protecting the lime from rainfall. If dust-suppression water-spray entails the risk of explosion, presumably railfall does also.

V

Because we conclude that appellant has not violated WAC 173-405-040(6) requiring reasonable precautions, we do not rule, today, upon appellant's contentions that the rule is invalid.

VI

Appellant contends that WAC 173-405-040(10) proscribing opacity

greater than 35 percent for more than 6 consecutive minutes makes conduct unlawful which the Washington Clean Air Act, chapter 70.94 RCW, does not. Appellant cites Kaiser Aluminum v. PCHB, 33 Wn. App. 352 (1982) for this proposition. We disagree.

In Kaiser, supra, the Court of Appeals held:

> It is readily apparent that emitting particulate matter into the atmosphere is not proscribed. The law is offended only when the substance emitted has the characteristics of and is emitted for a duration which, together, create a harmful potential. (Emphasis added.)

The decision went on to say:

> Regulation I, Section 9.04, however, provides:
>
> SECTION 9.04 PARTICULATE MATTER
>
> It shall be unlawful for any person to cause or allow the discharge of particulate matter which becomes deposited upon the real property of others,...
>
> On its face, this regulation makes conduct unlawful which the enabling statute does not; the statute simply does not proscribe the mere emission of particulate matter. (Emphasis added.)

In proscribing opacity over 35 percent for more than 6 consecutive minutes, WAC 173-405-040(10) controls emissions with such characteristics (opacity over 35 percent) and for a duration (6 consecutive minutes) as to create a harmful potential. It is not a rule proscribing mere emissions. It is a rule that is consistent with the Washington Clean Air Act, chapter 70.94 RCW.[2]

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2. The Washington State Supreme Court has upheld a similar opacity standard in Sittner v. Seattle, 62 Wn.2d 834, 384, P.2d 859 (1963):

VII

The new language of WAC 173-405-077, effective May 16, 1983, applies to this case. While both the old[3] and new[4] versions of

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An ordinance to be void for unreasonableness must be plainly and clearly unreasonable. Although the "opacity" standard may not detect all of the air contaminants which pollute the air, we cannot say that it is not a reasonable means by which to detect some of the contaminating particles which smoke contains. It is no defense that the "opacity" standard does not regulate all air contamination but permits some emissions to go unpunished since a law designed to prevent one evil is not void because it does not prevent another. Similarly, while it is true that the Ringelmann smoke chart measures coloration and not opacity, it does not necessarily follow that the chart may not be reasonably used as a basis for determining opacity. The Ringelmann Smoke Chart has been widely accepted throughout the United States as a measurement of air pollution by both legislatures and courts, and we find ourselves in agreement with the wisdon of this acceptance.

3. WAC 173-405-077 Abnormal operations or upset conditions. (1) Upset conditions may result in emissions in excess of the standards set by this chapter must be reported promptly to the department or appropriate air pollution control authority. An abnormal operation such as a startup or shutdown operation which can be anticipated must be reported in advance of the occurrence of the abnormal operation if it may result in emissions in excess of standards. Each kraft mill shall upon the request of the department or its designated agency, submit a full written report, including the known causes and the preventive measures to be taken to prevent a recurrence.

(2) Any period of excess emissions is presumed to be a violation unless and until the owner or operator demonstrates and the department finds that:

(a) The incident was reported as required; and

(b) Complete details were furnished the department or agency; and

(c) Appropriate remedial steps were taken to minimize excessive emissions and their impact on ambient air quality; and

(d) The incident was unavoidable.

(3) <u>If the conditions of (2) above are met, the incident is excusable and a notice of violation will not be issued</u>.

the rule require a source to notify PSAPCA in the event of emissions resulting from a startup or breakdown, the chief difference is that

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(4) If any of the conditions of (2) above are not met, the incident is not excusable and a notice of violation will be issued and a penalty may be assessed.

(5) For the department to find that an incident of excess emissions is unavoidable, the kraft mill must submit sufficient information to demonstrate the following conditions were met:

(a) The process equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with minimized emissions.

(b) Repairs or corrections were made in an expeditious manner when the operator knew or should have known the emission limitations were being or would be exceeded.

(c) The incident is not one in a recurring pattern which is indicative of inadequate design, operation or maintenance. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), Section 173-405-077, filed 8/20/80. Statutory Authority: RCW 43.21A-.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), Section 173-405-077, filed 3/21/80.] (Emphasis added.)

4. The New rule:
WAC 173-405-077 Report of startup, shutdown, breakdown or upset conditions. If a startup, shutdown, breakdown or upset condition occurs which could result in an emission violation or a violation or an ambient air quality standards, the owner or operator of the source shall take the following actions as applicable:

(1) For a planned condition, such as a startup or shutdown, the condition shall be reported to the department, or its delegated authority, in advance of its occurrence.

(2) For an unplanned condition, such as a breakdown or upset, the condition shall be reported to the department, or its delegated authority as soon as possible.

Upon request of the department or its delegated authority, the owner or operator of the source shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the change of recurrence.

Compliance with the requirements WAC 173-405-077, does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with all the

the old rule forgave the violation upon such notice, the new rule does not. Appellant contends that DOE must forgive such emissions but in doing so makes no citation to the Washington Clean Air Act, chapter 70.94 RCW for that proposition. While appellant cites certain federal cases interpreting Section 111 of the Federal Clean air Act relating to EPA standards for new sources, we find these to be inapposite. The legislature has specifically delegated to DOE the power to make rules under the Washington Clean Air Act. RCW 70.94.331 and RCW 43.21A.060(3). The new rule adopted by DOE must be upheld if it is reasonably consistent with the statute being implemented. Weyerhaeuser v. DOE, 86 Wn.2d 310, 545 P.2d 5 (1976). The new WAC 173-405-077 has not been shown to be invalid under that test.[5]

VIII

Any Finding of Fact which should be deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions the Board enters this

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requirements of chapter 173-405 WAC nor from the resulting liabilities for failure to comply. [Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), Section 173-405-077, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), Section 173-405-077, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), Section 173-405-077, filed 3/2/80.]

5. By our conclusion of law today, we do not endorse the wisdom of the new WAC 173-405-077 adopted by DOE. It would be inappropriate for this Board to substitute its judgment on which is the wisest rule when the rule adopted by DOE, as here, has not been shown to be invalid.

ORDER

The $250 civil penalty for June 8, 1983, (NOCP No. 5793) is affirmed but $150 thereof suspended on condition that appellant not violate DOE's opacity regulations, WAC 173-405-040(10), for six months.

The $250 civil penalty for July 5, 1983, (NOCP No. 5818) is affirmed but suspended on condition that appellant not violate DOE's opacity regulation, WAC 173-405-040(10), for six months.

The $250 civil penalty for June 21, 1983, (NOCP No. 5817) is affirmed but $150 thereof suspended on condition that appellant not violate DOE's opacity regulation, WAC 173-405-040(10), for six months.

DONE AT Lacey, Washington, this 22nd day of February, 1984.

POLLUTION CONTROL HEARINGS BOARD

Gayle Rothrock
GAYLE ROTHROCK, Chairman

(See Concurring Opinion)
DAVID AKANA, Lawyer Member

LAWRENCE J. FAULK, Member

William A. Harrison
WILLIAM A. HARRISON
Administrative Law Judge

CONCURRING OPINION:

I concur in the result.

David Akana

DAVID AKANA, Lawyer Member